Section I. Space Needle Inventory and Assessment Methodology

INVENTORY

The inventory began with the current view protected sites as found in the State Environmental Policy Act (SEPA) View Protection Policy in SMC 25.05.675. This list of some 86 sites contains public viewing sites throughout the city and includes parks, pocket parks, public-owned properties, and playfields. The current view protection policy states in Section 25.05.675 P 2. b. i. "It is the City's policy to protect public views of historic landmarks." Under the broadest interpretation, this can include not only the SEPA sites but any public place, including street rights of way. Map 1 (page 9) shows possible public viewing sites of the Space Needle in just the downtown sector and illustrates the immensity of this task. Sites used as public gathering places were also considered such as ferry terminals, certain athletic facilities, and spaces for concerts or festivals. Creating a usable and realistic list of public places was the first task. While by no means comprehensive, the SEPA sites together with additional public places identified a fairly sound data base in which to begin Space Needle view assessment.

General Comments

For identification purposes, DPR divides their parks into type categories: Mini-parks (e.g. pocket parks), Neighborhood parks (serves a neighborhood), Community parks (serves more than one neighborhood), and Regional parks (serves city-wide and regional users). In some cases, it is difficult to monitor a park's users since it can vary depending on weather, time of day, season, activities, frequency of documentation, and public knowledge of a park's location. Therefore, individual park assessments will use DPR's park type categories for identification rather than specify user groups.

Some SEPA sites are maintained by Seattle Transportation (SeaTran), Seattle Public Utilities (SPU), Seattle Board of Education, Washington Department of Transportation, and King County. This information will be noted in the individual view site assessments. Creating uniform standards of maintenance, accessibility, and viewing amenities will need to be addressed at some point for these interdepartmental managed properties.

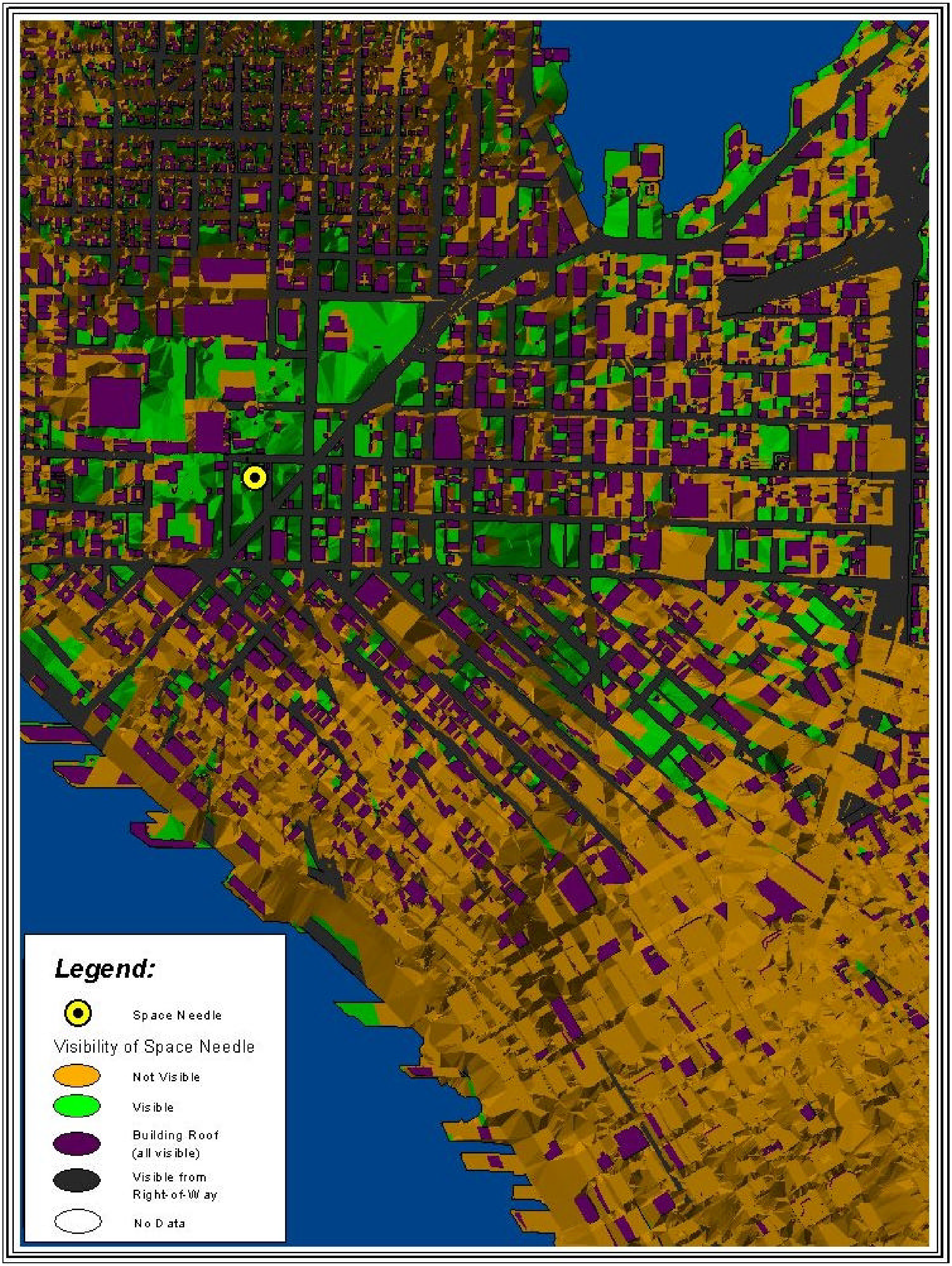
Standards used for view analysis of the Space Needle include taking 50 mm, daylight photographs of the Space Needle from a chosen public viewpoint. Fujichrome 400 speed slide film and Kodak 200 print film were used. Slides and prints of potential view sites were taken during the summer and fall of 2000. For the purpose of viewing an object, such as the Space Needle, a 50 mm or "normal" lens is used since it most closely mimics human vision perspectives. Computer graphic imagery was created using ArcView 3D Analyst.

ASSESSMENT METHODOLOGY

Three key factors emerged in establishing a methodology for analyzing Space Needle views. First, how much of the Space Needle view is acceptable and at what range? Second, what public view points offer the greatest viewing amenities? And third, how secure is the view; what may happen to diminish the views over time, e.g., as a result of development within the view corridor?

Factor 1.
Criteria for "how much of" and "range of" the Space Needle view.

This factor involved identifying how much of the structure is considered a full or "ideal" view and from how far away. The height of the Space Needle is 605'. Viewpoints used by Seattle tour companies and professional photographers select views showing at least ¾ of the tower and all of the saucer as good views. As a starting point we rated views based on the ability to see the top of the



Map 1: Possible Public Viewsites of the Space Needle

structure (the saucer) down the tower to the lower Skyline Room (100 level) which is basically ¾ of the structure. Blocked or diminished views were rated as poor or undesirable views. In addition to a good view of the structure itself, a sufficient amount of surrounding open/negative space to frame the landmark also was considered. Background elements may be equally important within a view of the Space Needle. Defining a sufficient amount of framed view will always be very subjective. For the purposes of this study, roughly a 400′ view frame of the Space Needle was selected. (Figure 1, left).

Viewing angles from public view points also varied. Viewpoints from farther away offer a smaller viewing angle; closer viewpoints provide a greater viewing angle. The view distance to the Space Needle falls between six miles (from some SEPA sites) to the immediate setting of the Seattle Center. Clearly six miles does not present the Space Needle as the main object in a view but rather part of the larger landscape (skyline). As this assessment is focused on the Space Needle as the main object in a view, the latter issue of skylines will be discussed in future analysis of Seattle's View Protection Policies. A distance of between 0 to 2 ½ miles was chosen as a reasonable viewing distance where the public could focus on enjoying a view of the structure or could clearly see its relationship in the context of the city. This is based in part on information gained through review of our inventory data.

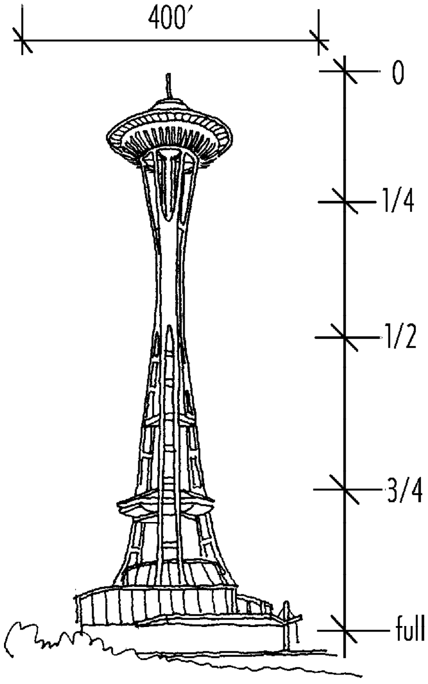


Figure 1:
400' View Frame

Structure criteria summary:

- *A full or good view of the Space Needle encompasses at least ¾ of the tower, all of the saucer, and some surrounding open space to frame the landmark.*
- *A suitable viewing distance is from 0 to approximately 2½ miles.*

Factor 2.
Criteria for View Points and Viewing Amenities.

Developing the criteria or standards for determining public view points and viewing amenities are based on urban design principles, park design features, DPR maintenance and facilities standards, criteria used by other cities, and land use policies.

Information from a variety of sources was consulted on urban design and site planning principles that dealt with elements of space, comfort, use, noise abatement and access. Sensory/refuge studies were examined on the psychological impacts and comfort needs of "pausing places" and how landscape and park design can support these spaces by enhancing view opportunities. Other cities utilized similar goals in their review criteria and in Seattle, the Design Commission encourages these policies when reviewing public open space. From all these materials, the following view points and site amenities were determined:

View point criteria:

- *The property is a city park and is under certain DPR maintenance policies to accommodate users, or is publicly owned and maintained by other public agencies (Figure 2, page 12).*
- *Park amenities are available such as benches, retaining walls, viewing decks, or telescopes for enjoying views (Figure 3, page 12).*
- *The viewing area offers a relaxed or restful setting. Noise, reflected glare, or other negative sensory impacts do not compete with the visual experience (Figure 4, page 12).*
- *The view point(s) are popular viewing places used by the general public. This includes locally-used places for the neighborhoods as well as destination points for tourists. People use these sites for more passive, recreational uses such as for picnics or simply as good places to walk, jog, bike, or pause and enjoy the view (Figure 5, page 12).*

- *The place is accessible—for the disabled as well as providing adequate parking and walkways for reaching view point(s) (Figure 6).*

Factor 3. View Corridor Impacts

The third factor addresses to what degree could the view erode over time, as a result of unmitigated development. To answer this we looked at future zoning potential within the view corridor, using 3-D modeling to illustrate views. It should be noted that with this modeling, only blocky, rectangular forms are available for buildings, therefore, the images show extremes in height/bulk and are based on entire city block build-outs rather than as individual buildings. The maps used for this study are for identification purposes only and are not to scale.

The number of parcels affected and on some sites, the amount of acreage within a view corridor is identified. Economic impacts studies are possible for more information but were not done at this time.

Figure 2: Tree Trimming

Figure 3: Telescope Amenity

Figure 4: A Restful Setting

Figure 5: Recreational Use

Figure 6: Accessibilty for the Disabled

Glossary of View Terms:

View Corridor: *A view corridor or view cone is a three-dimensional area extending out from a viewpoint. The width of the view corridor depends on the focus of the view. The focus of the view may be a single object, such as the Space Needle, which results in a narrower view corridor of framed view, or a group of objects, such as the downtown skyline, which would result in a wide corridor or wide-angle view.*

Viewpoint: *A viewpoint is a location from which to enjoy a view. A viewpoint may be a generalized location and include several vantage points where the view may be seen to best advantage, or a single observation point.*

View/Viewshed: *A view that is classified by viewing type. A framed or vista view (10-40 degrees) is a confined view often focused upon or toward a specific feature in the landscape, such as the Space Needle. A wide angle view (40-180 degrees) is a view encompassing a considerable viewing angle. A panorama view (180-360 degrees) is a view which provides the observer with a great sweep of the setting.*